

**WHAT IS CLAIMED IS:**

1. A removable fuel cell cartridge for a liquid fuel cell assembly comprising:  
a container comprising a first chamber for fuel comprising at least one port for delivery of fuel to a fuel cell assembly; and  
a second chamber for one or more supplemental components, wherein said second chamber comprises at least two ports at least one of which communicates with said fuel cell assembly.
2. The fuel cartridge of claim 1 wherein said first and said second chambers are separated by an immovable divider.
3. The fuel cartridge of claim 1 wherein said supplemental components are selected from the group consisting of air filters, fuel filters, an ion exchange column, a fan, a pump, a pump control chip, a metering valve, a metering pump, a membrane, a water absorbent, a carbon dioxide absorbent, and a methanol absorbent.
4. The fuel cartridge of claim 1 wherein said container has a proximal end which engages said fuel cell assembly and a distal end opposite said proximal end, wherein each of said first and second chambers is located between said proximal and said distal ends of said container.
5. The fuel cartridge of claim 1 wherein said container has a proximal end which engages said fuel cell assembly and a distal end opposite said proximal end, wherein said first chamber is located near said proximal end and said second chamber is located near said distal end.
6. The fuel cartridge of claim 1 wherein said container has a proximal end which engages said fuel cell assembly and a distal end opposite said proximal end wherein said second chamber is located near said proximal end and said first chamber is located near said distal end.
7. The fuel cartridge of claim 6 wherein said second chamber contains a metering valve or a metering pump in fluid communication with said first chamber by way of a first port and wherein said second chamber comprises a second port positioned to be in fluid communication with an anode loop of said fuel cell assembly.
8. The fuel cartridge of claim 7 wherein said fuel metering valve or metering pump is capable of being controlled by an actuator located within said fuel cell assembly.
9. The fuel cartridge of claim 6 wherein said second chamber comprises an inlet and outlet port for fluid communication with the anode loop of said fuel cell assembly, a fluidic connector between said inlet and outlet ports and a metering valve or a metering pump in fluid communication with said first chamber and said fluidic connector.
10. The fuel cartridge of claim 9 wherein said fuel metering valve or metering pump is capable of being controlled by an actuator located within said fuel cell assembly.
11. The fuel cartridge of claim 9 further comprising a fuel filter in said second chamber in fluid communication with said first chamber or said fluidic connector.
12. The fuel cartridge of claim 9 further comprising an ion exchange resin in fluid communication with said first chamber or said fluidic connector.
13. The fuel cartridge of claim 9 wherein said second chamber comprises an inlet and outlet port for fluid communication with the anode loop of said fuel cell assembly, a fluidic connector between said inlet

and outlet ports and a metering valve or a metering in fluid communication with said first chamber and a fuel feed port for fluid communication with the anode loop in said fuel cell assembly.

14. A removable fuel cell cartridge for a liquid fuel cell assembly comprising  
a container including a first chamber for fuel having at least one port for delivery of fuel to a fuel cell assembly; and  
an absorbent device having at least two ports at least one of which communicates with said fuel cell assembly.

15. The fuel cell cartridge of claim 14 wherein said absorbent device is configured to remove water an exhaust loop from said fuel cell assembly.

16. The fuel cell cartridge of claim 14 wherein said container includes a second chamber and said absorbent device is located in said second chamber.

17. The fuel cell cartridge of claim 16 wherein said first and said second chambers are separated by an immovable divider.

18. The fuel cartridge of claim 14 further comprising one or more supplemental components selected from the group consisting of air filters, fuel filters, an ion exchange column, a fan, a pump, a pump control chip, a metering valve, a metering pump, a membrane, a water absorbent, a carbon dioxide absorbent, and a methanol absorbent.

19. A fuel cell assembly comprising the fuel cartridge of claim 1 or 14.

20. An electronic device comprising the fuel cell of claim 19.

21. An electrical power supply comprising the fuel cell of claim 19.

22. The power supply of claim 21 comprising a plurality of fuel cartridges.